

THAT WHICH IS CLAIMED IS:

1. A method of achieving an effective "free chlorine" level in treating with a biocide water that is in contact with biofilm or that comes into contact with biofilm, which method comprises introducing into said water a biocidally effective amount of at least one 1,3-dibromo-5,5-dialkylhydantoin wherein said amount (i) provides in the water a biocidally effective "free chlorine" level that is higher than would be provided by an equimolar quantity of N,N'-bromochloro-5,5-dimethylhydantoin, (ii) results in eradication or at least effective biocidal challenge of said biofilm, and (iii) enables the rate of biocide consumption in treating said water to be reduced as compared to N,N'-bromochloro-5,5-dimethylhydantoin, said at least one 1,3-dibromo-5,5-dialkylhydantoin that is introduced into said water being characterized in that one of the alkyl groups in the 5-position is a methyl group and the other alkyl group in the 5-position has in the range of 1 to 4 carbon atoms.

2. A method according to Claim 1 wherein said at least one 1,3-dibromo-5,5-dialkylhydantoin that is introduced into said water is 1,3-dibromo-5,5-dimethylhydantoin.

3. A method according to Claim 1 wherein said at least one 1,3-dibromo-5,5-dialkylhydantoin is introduced continuously or substantially continuously into said water from a dispenser containing and dispensing said at least one 1,3-dibromo-5,5-dialkylhydantoin at a rate that maintains in the water said biocidally effective amount.

4. A method according to Claim 3 further comprising periodically charging said dispenser with granules of said at least one 1,3-dibromo-5,5-dialkylhydantoin that are adapted to be dissolved and dispensed from said dispenser at a rate that maintains in the water said biocidally effective amount.

5. A method according to Claim 4 wherein said dispenser is a floater-type dispenser.

6. A method according to any of Claims 4 or 5 wherein said at least one 1,3-dibromo-5,5-dialkylhydantoin that is introduced into said water is 1,3-dibromo-5,5-dimethylhydantoin, and wherein said granules of 1,3-dibromo-5,5-dialkylhydantoin are able to be dissolved in quiescent water that is at a temperature of 25°C at a rate such that 60 minutes after initial contact, the water contains in the range of about 75 to about 430 mg/L of "free chlorine" per gram of granules.

7. A method according to any of Claims 4 or 5 wherein said at least one 1,3-dibromo-5,5-dialkylhydantoin that is introduced into said water is 1,3-dibromo-5,5-dimethylhydantoin, and wherein prior to introduction into said water said granules of 1,3-dibromo-5,5-dialkylhydantoin have an average crush strength of at least about 15 pounds per inch of thickness and an average size in the range of about 40 U.S. standard mesh size to about 3/8-inch.

8. A method according to Claim 2 wherein said biocidally effective amount of 1,3-dibromo-5,5-dimethylhydantoin that is introduced into said water results in eradication or at least effective biocidal challenge of said biofilm to a greater extent than would be accomplished by an equimolar quantity of N,N'-bromochloro-5,5-dimethylhydantoin.

9. A water sanitizer which comprises a dispenser that automatically dispenses a sanitizing chemical into water at a controlled rate, said dispenser containing a charge of at least one 1,3-dibromo-5,5-dialkylhydantoin that as charged thereto is in the form of granules free of hydrophobic binder, which granules have an average crush strength of at least 15 pounds per inch of granule thickness, and an average size in the range of about 40 U.S. standard mesh size to about 3/8-inch, said dispenser being adapted to dispense dissolved biocide species from said at least one 1,3-dibromo-5,5-dialkylhydantoin at a rate that maintains a biocidally effective amount of "free chlorine" in said water.

10. A water sanitizer according to Claim 9 wherein said granules as charged to said dispenser are devoid of any additive therein conferring binding or hardening action to said granules.

11. A water sanitizer according to any of Claims 9 or 10 wherein said average crush strength is at least 20 pounds per inch of granule thickness.

12. A water sanitizer according to any of Claims 9 or 10 wherein said at least one 1,3-dibromo-5,5-dialkylhydantoin is 1,3-dibromo-5,5-dialkylhydantoin and wherein said granules are able to be dissolved in quiescent water that is at a temperature of 25°C at a rate such that 60 minutes after immersing said granules in quiescent water, the water contains in the range of about 75 to about 430 mg/L of "free chlorine" per gram of granules that were immersed in the water.

13. A water sanitizer according to Claim 12 wherein said average crush strength is at least 20 pounds per inch of granule thickness.